

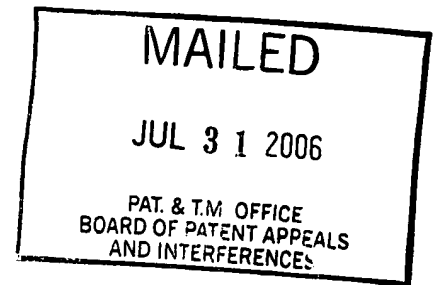
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT P. BENJEY

Appeal No. 2006-1744
Application No. 10/060,121

ON BRIEF



Before OWENS, LEVY, and FETTING, *Administrative Patent Judges*.
OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal is from a rejection of claims 1-12, which are all of the pending claims.

THE INVENTION

The appellant claims a system and method for controlling the flow of liquid fuel and fuel vapor during refueling of a motor vehicle fuel tank. Claim 1 is illustrative:

1. A system for controlling flow of liquid fuel and vapor during refueling of a motor vehicle fuel tank with a filler tube for receiving a fuel dispensing nozzle comprising:

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(a) a vent valve disposed in the tank and having an inlet communicating with the vapor dome in the tank and an outlet communicating with a remote vapor storage device;

(b) a seal disposed in the filler tube and operable for sealing about the nozzle upon insertion therein;

(c) a recirculation conduit having one end connected to admit fuel vapor to the filler tube at a location downstream of the seal and having an end opposite said one end connected to receive fuel vapor from the outlet of said vent valve; and,

(d) a neck portion in the filler tube downstream of the location of said recirculation conduit connection location, wherein said neck has the inner periphery thereof sized to receive the nozzle in closely fitting arrangement and to form an effective dynamic seal about liquid discharging from the nozzle.

THE REFERENCES

Aubel et al. (Aubel)	5,183,087	Feb. 2, 1993
Yamazaki et al. (Yamazaki)	5,606,954	Mar. 4, 1997
Hashimoto et al. (Hashimoto)	5,769,057	Jun. 23, 1998

THE REJECTION

Claims 1-12 stand rejected under 35 U.S.C. § 103 as being unpatentable over Yamazaki in view of Aubel and Hashimoto.

OPINION

We affirm the aforementioned rejection.

The appellant does not argue any particular claim, or argue that if the references were combined, the claimed invention would not be obtained. The appellant's sole argument is that one of ordinary skill in the art would not have combined the teachings in the applied references. Hence, we limit our discussion to that argument. See 37 CFR § 41.37(c)(1)(vii)(2004).

Yamazaki discloses "an evaporative fuel processing device for suppressing the release of evaporative fuel from a fuel tank during refueling with a refueling nozzle" (col. 1, lines 7-10). The device includes a float valve (26) in communication with the vapor dome of the tank, and an evaporative fuel passage (23a, 55) between the float valve and a refueling line (22) (col. 3, lines 44-58; col. 4, lines 8-20; figure 1).

Aubel discloses a motor vehicle fuel vapor recovery system having a fuel nozzle seal (24) (col. 3, lines 59-63; figure 3).

Hashimoto discloses a filler tube (3) having a neck portion in a closely fitting arrangement with a nozzle (N) (col. 5, line 12; figure 4).

The appellant argues that at column 9, lines 7-9 Yamazaki explicitly recognizes that generating fuel vapor requires drawing

fresh air into a filler tube during refueling, and that adding Aubel's seal to Yamazaki's nozzle would prevent fresh air from being drawn in, causing the rushing fuel to pull the limited amount of air below the seal toward the tank and create a vacuum at the nozzle tip, thereby shutting off the nozzle prematurely (brief, page 4; reply brief, page 2). The portion of Yamazaki relied upon by the appellant states that "[e]vaporative fuel newly generated in the tank body 21 is increased in accordance with an increase of fresh air attendant with a decrease of evaporative fuel circulated." That portion does not state that air is desirable or is to be increased. Yamazaki discloses connecting evaporative fuel passage 27, at a location nearer the tank body than a shutter (57) that appears to be comparable to the appellant's seal (col. 9, lines 48-54; figure 9). Moreover, the appellant acknowledges that it was known in the art to attach a vapor recirculation line to a nozzle downstream of a nozzle seal (prior art figure 3). Thus, Yamazaki's disclosure of a shutter at least would have fairly suggested, to one of ordinary skill in the art, a nozzle seal.

The appellant argues that at column 7, lines 26-46, Hashimoto requires a specific amount of air to be drawn into the filler tube during refueling to create negative pressure without

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causing premature nozzle shutoff (brief, page 5; reply brief, page 2). The portion of Hashimoto relied upon by the appellant discloses controlling the inhalation of outside air (col. 7, lines 31-32). Hashimoto teaches that it is desirable that the air drawn in "may become a little greater than zero" (col. 9, lines 48-49). Hashimoto does not indicate that an amount of air that is a little greater than zero would exceed the amount drawn in through a nozzle seal. We note that the appellant acknowledges that air can leak past his seal (specification, page 9, ¶ 0032).

For the above reasons, we are not convinced of reversible error in the examiner's rejection.

DECISION


The rejection of claims 1-12 under 35 U.S.C. § 103 over Yamazaki in view of Aubel and Hashimoto is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

Terry J. Owens
Terry J. Owens
Administrative Patent Judge


Stuart S. Levy
Administrative Patent Judge

BOARD OF PATENT
APPEALS AND
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Anton W. Fetting
Administrative Patent Judge

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